

ABSTRACT

The invention provides a procedure that is applicable to various halftoning methods, which
5 minimizes image distortion introduced by the halftoning process. The procedure involves maintaining specific relationships between the halftone pattern and the phase and resolution of the input image. Specifically, that the halftone pattern is designed such that it does
10 not bias tone reproduction with respect to the location of the input image pixels--each input pixel should be given equal weight when filtered by the halftoning process. This suggests a 1 to 1 relationship between each pixel of the input image and the corresponding
15 tone output produced by the halftoning process. The procedure results in improved print quality, manifested by avoidance of certain types of moiré which are commonly associated with halftoning, as well as improved reproduction of edges and image details.

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